REGISTER BY MONTH
XX, XXXX AND SAVE!

Grid Modernization – Technical Challenges & Innovative Solutions

ELECTRICAL TRANSMISSION & SUBSTATION STRUCTURES CONFERENCE 2015
Branson, Missouri | September 27 - October 1

Final Program
Hiltons of Branson | Branson Convention Center
www.etsconference.org #ETSC15

Download the ETS Conference Mobile App and have everything you need in the palm of your hand!
Welcome to Branson and the Beautiful Ozarks!

On behalf of the Structural Engineering Institute (SEI) of the American Society of Civil Engineers (ASCE) and the ETS Conference Steering Committee, it’s my pleasure to welcome you to the 2015 Electrical Transmission and Substation Structures Conference.

While others talk smart grids and resilient grids, in Branson this week we will talk about what it takes to make strong grids. With the theme “Grid Modernization — Technical Challenges and Innovative Solutions”, the 2015 conference promises to be a forward-looking event where transmission and substation engineers gain critical knowledge to design, build, maintain and secure a global grid suited for 21st century expectations.

Beginning with Sunday’s panel discussion workshop, “Storm Hardening, Resilience and Security Issues for Utilities,” the conference promises four days of targeted technical learning combined with industry specific exhibits, focused forums, and special events ideal for networking and friendly Midwest socializing.

The technical sessions run Monday through Wednesday offering insight into how others in the industry have solved technical challenges and developed innovative solutions. On Wednesday afternoon, ASCE’s Leadership gives an update on the ASCE Codes and Standards we all follow in our daily work followed by an update on the upcoming changes in the 2017 NESC.

On Thursday, Quanta Services is sponsoring an exciting construction-oriented outdoor demonstration day. Other companies will also be demonstrating various industry related equipment and activities.

You will also want to take advantage of the numerous social networking events during the week. Most of these events plus the lunches and refreshment breaks are taking place in the exhibit hall giving you plenty of time to spend visiting with innovative exhibitors and your peers and colleagues. The exhibitors are all focused on transmission lines and substation structures at this conference, so take advantage of their expertise and networking opportunities.

Where else but Branson during these next few days can you so easily strike up conversations with peers who could become your next client, employer, or strategic partner on a future project?

So welcome again — I’m excited to be with you here in Branson, Missouri!
SUNDAY, SEPTEMBER 27

11:00 A.M. – 6:00 P.M. – REGISTRATION
Concourse Center, 2nd Floor, Branson Convention Center (BCC)

1:00 – 5:00 P.M.
PRE-CONFERENCE WORKSHOP: PANEL DISCUSSION OF STORM HARDENING, RESILIENCY AND SECURITY ISSUES (Earn 3.5 PDHs)
Taneycomo Ballroom, 1st Floor, BCC

Hear the Congressman’s unique perspective on how to fix the regulatory machine in Washington, DC. Learn how he’s using his 40 year career in engineering and construction to get Congress to take a hard look at the federal regulatory process.

As one of two professional engineers in Congress, he has a seat on the Committee on Energy and Commerce, where he has been active on issues related to the coal industry, environmental regulation, energy efficiency, and health care. He serves as the vice-chairman of the Subcommittee on Oversight and Investigations.

1:00 – 5:00 P.M.
OPENING PLENARY SESSION WITH KEYNOTE ADDRESS AND AWARD
Taneycomo Ballroom, 1st Floor, BCC

2015 AWARD RECIPIENT:
Douglas C. Sherman, P.E., M.ASCE, Past Vice President, Valmont-Newmark

Gene Wilhoite Innovations in Transmission Line Engineering Award
Presented to an individual for significant contributions to the advancement of the art and science of transmission line engineering.

AN ENGINEER’S APPROACH TO COMMON SENSE REGULATIONS
Congressman David McKinley, P.E., F.ASCE

Hear the Congressman’s unique perspective on how to fix the regulatory machine in Washington, DC. Learn how he’s using his 40 year career in engineering and construction to get Congress to take a hard look at the federal regulatory process.

As one of two professional engineers in Congress, he has a seat on the Committee on Energy and Commerce, where he has been active on issues related to the coal industry, environmental regulation, energy efficiency, and health care. He serves as the vice-chairman of the Subcommittee on Oversight and Investigations.

3:15 – 3:45 P.M. – REFRESHMENT BREAK FOR WORKSHOP ATTENDEES
Taneycomo Ballroom, 1st Floor, BCC
Sponsored by ReliaPOLE

5:30 – 7:00 P.M.
GRAND OPENING RECEPTION
Exhibit Hall A-B, 1st Floor, BCC
Sponsored by Trinity Meyer Utility Structures

MONDAY, SEPTEMBER 28

6:45 A.M. – 6:00 P.M.
REGISTRATION
Concourse Center, 2nd Floor, Branson Convention Center (BCC)

6:45 – 7:30 A.M.
BREAKFAST
Prefunction, 1st Floor, BCC
Sponsored by Black & Veatch Corporation

7:30 – 9:30 A.M.
OPENING PLENARY SESSION WITH KEYNOTE ADDRESS AND AWARD
Taneycomo Ballroom, 1st Floor, BCC

GEOGRAPHY WILHOITE INNOVATIONS IN TRANSMISSION LINE ENGINEERING AWARD
Presented to an individual for significant contributions to the advancement of the art and science of transmission line engineering.

2015 AWARD RECIPIENT:
Douglas C. Sherman, P.E., M.ASCE, Past Vice President, Valmont-Newmark

ASCE REMARKS
Thomas W. Smith, III, ENV. SP, CAE, F.ASCE, Executive Director, ASCE

INFRASTRUCTURE’S ROLE IN ECONOMIC PROSPERITY
ASCE President Elect Mark W. Woodson, P.E., L.S., D.WRE, F.ASCE

KEYNOTE: FERC ORDER 1000 FROM A UTILITY’S PERSPECTIVE
Maureen A. Borkowski, President, Ameren Transmission Company
Maureen Borkowski will share how the MISO, PJM and SPP RTOs have developed unique rules to implement the planning, bidding and awarding of competitive transmission projects. She will also discuss the challenges that both regulated entities and merchant developers face in this new competitive marketplace.
MONDAY, SEPTEMBER 28

9:30 – 10:15 A.M. – REFRESHMENT BREAK
Exhibit Hall A-B, 1st Floor, BCC
Sponsored by Fabrimet Inc.

10:15 A.M. – NOON
SESSION 1: STRUCTURAL ANALYSIS 1
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Mike Miller, P.E., M.ASCE

The conference kicks off with presentations on our most common engineered structure type: tubular steel poles. First, two projects answer the questions “Will they pass the test?” and “How close does analysis match full-scale testing?” Follow that with an analysis of slip joint connections, and finally the session will close with a challenging project using tripod tubular structures for a long-span lake crossing.

Validation and Testing of Tubular Steel Pole Designs for Southern California Edison’s Tehachapi Renewable Transmission Project
Clinton Char, P.E., Tony Cunha, P.E., Southern California Edison; Jerry Lembke, P.E., Valmont-Newmark

Design and Testing of 500kV Double Circuit Monopoles for Heartland Transmission Project in Edmonton, Alberta
Kishor Kumar, P.Eng., SNC Lavalin; Jason Dwyer, P.Eng., AltaLink

Slip Joint Connections – How Do These Things Work?
Richard Solcum, P.E., Mark Fairbairn P.E., M.ASCE, Trinity Meyer Utility Structures, LLC

Innovative Structure Designs for Large Spans
Jaron Reay, P.E., Abe Dilworth, P.E., Electrical Consultants, Inc.

NOON – 1:30 P.M. – LUNCH
Exhibit Hall A-B, 1st Floor, BCC
Sponsored by Sabre-FWT

1:30 – 3:15 P.M.
SESSION 2: SPECIAL DESIGN CONSIDERATIONS
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Marlon Vogt, P.E., M.ASCE

Dare to be BOLD! See the benefits of getting out of our comfort zone! The development of an innovative line design combining aesthetics with performance, a worldwide view on structure aesthetics (“Pretty Poles” and “Terrific Towers”), the critical role of the engineer in environmental permitting and application of fiber reinforced polymers for structures up to 287kV highlight this session.

Developing a Structure for BOLD™ – Challenges from a Simple Aesthetic Structure Design
Nancy Fulk, Ph.D., P.E., Dave Parrish, P.E., American Electric Power; Anthony Hansen, P.E., Jeff Steele, P.E., Valmont-Newmark

Aesthetic Transmission Line Structures: Past Present & Future
Mike Khavari, P.E., P.Eng., ASEC Inc.; Kenneth Sharpless, P.E., Valmont-Newmark

3:15 – 4:00 – REFRESHMENT BREAK
Exhibit Hall A-B, 1st Floor, BCC
Sponsored by Falcon Steel Company

4:00 – 5:30 P.M.
SESSION 3: MANAGING AGING INFRASTRUCTURE
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Gary Bowles, P.E., F.SEI, M.ASCE

Asset management and inspection have certainly not let technology pass them by. See how leaders in this field and utilities around the globe have embraced the latest tools, technology and techniques. Strap in for a glimpse of the future with drones carrying “smart” vision and data collection technologies.

Celanese – Peters Mountain 138kV Line: A Case Study of One of American Electric Power’s Oldest Weathering Steel Pole Lines

Generation Drone: The Future of Utility O&M
Grant Leaverton, M.B.A., Advanced Aerial Inspection Resources; Wesley Oliphant, P.E., CWI, F.SEI, F.ASCE, ReliaPOLE Inspection Services Co.

Best Practices for Transmission Line Inspections and Recommended Inspection Techniques
Andrew Stewart, M.S., Robert Nelson, B.S., Matthew Sinclair, EDM International, Inc.; Alex Mogilevsky, Senior Program Manager, CEATI International Inc.

5:30 – 7:00 P.M. – POOLSIDE NETWORKING RECEPTION
Pool Deck & Courtyard, 1st Floor, BCC
Sponsored by Power Line Systems, Inc.
SESSION 5: CASE STUDIES
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Frank Agnew, P.E., M.ASCE

Four case studies are highlighted in this session. Hear how the challenges presented by the Troy Meadows wetlands, the open water of the Albemarle Sound, the steep Gallatin Canyon and the constraints of Florida development were addressed with innovative design solutions using micropiles, concrete piles, pile caps, hand holes for concrete piers, helicopters and integrated line design.

Trowbridge-Winfall Transmission Line Foundation Design
Jason Truckenbrod, P.E., Steven Miller, P.E., Bruce Roth, P.E., GAI Consultants, Inc.; Robert Smith, P.E., Dominion Technical Solutions, Inc.

Micropile Design and Construction in Limited Access Wetland Habitat
Steven Davidow, P.E., S.E., Crux Subsurface, Inc.; David Carr, P.E., Burns & McDonnell

Jack Rabbit-Big Sky 161kV National Forest Canyon Construction
Anders Fiske, P.E., Heather Dell, HDR Engineering

Taft-Lakeland 230kVTL
Chuck Easterling, P.E., Orlando Utilities Commission; Curt Smith, P.E., Rishi Moghe, P.E., Black & Veatch

SESSION 6: FOUNDATIONS
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: David Todd, P.E., M.ASCE

Foundations are more than just a hole in the ground that you fill with money. As described by these four projects, foundations may be the most important element in the transmission line. Learn about deflection criteria, long-term soil creep, nondestructive testing of deep foundations, and no concrete, 100% steel foundations.

Recommendations for Steel Pole and Drilled Shaft Deflection Criteria Based on a Parametric Study of a 138kV Double Circuit Transmission Line

Foundation Designs for a 345kV Transmission Line Constructed in the Lakebed of Glacial Lake Agassiz
David Wedell, P.E., POWER Engineers, Inc.; Gerald Chezik, P.E., P.M.I., Xcel Energy; Bret Anderson, P.E., Northern Technologies, Inc.

Deep Foundations – Combining Construction Methods, Engineering, Inspection and Testing
Shane Watson, P.E., Bruce LaMeres, P.E., Electrical Consultants Inc.

Ameren Transmission Company’s Illinois Rivers Transmission Line River Crossings Foundation Design

SESSION 7: SUBSTATION DESIGN ISSUES
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Jerry Wong, P.E., F.SEI, M.ASCE

Seismic analysis, seismic isolation and seismic retrofit options with applications. The session closes with a broad overview and real world applications to address physical security, the newest threat to substations.

Seismic Base Isolation of a High Voltage Transformer
Robert Cochran, P.E., S.E., Seattle City Light

Innovative Analysis and Seismic Retrofit of 500kV Flexible Bus Substation Support Structures
Scott Howard, P.E., WRK Engineers; Craig Riker, P.E., San Diego Gas & Electric; Brian Knight, S.E., P.E., Sarah Knoles, EIT, WRK Engineers

NERC CIP-014-01: Physical Security – Regulatory Compliance and Real World Implementation
Jeffrey Boucher, P.E., Katherine Bentley, P.E., HDR Engineering

5:30 – 7:00 P.M. – NETWORKING RECEPTION
Exhibit Hall A-B, 1st Floor, BCC
Sponsored by Electrical Consultants, Inc.
WEDNESDAY, SEPTEMBER 30

7:00 A.M. – 4:00 P.M. – REGISTRATION
Concourse Center, 2nd Floor, Branson Convention Center (BCC)

7:25 – 8:10 A.M. – BREAKFAST
Prefunction, 1st Floor, BCC
Sponsored by Beta Engineering

8:10 – 9:30 A.M.
SESSION 8: CONSTRUCTION CHALLENGES
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Dana Crissey, P.E., M.ASCE

It’s just never easy! Hear the stories of three teams forced to think outside the box to solve a myriad of construction challenges. Whether finding solutions in high-temperature; low-sag conductor; large-diameter vibratory caissons; or developing fall protection methods for a system-wide implementation, these project teams just “got ‘er done”!

Design & Construction Challenges from One Utility’s CREZ Transmission Lines
Donald Cannon, M.ASCE, MSCE, David Hancock, P.E., M.ASCE, Burns & McDonnell; Neal Chapman, MSCE, P.E., Cross Texas Transmission, LLC

CapX2020 Brookings to Hampton 345kV River Crossing Foundation Challenges
Lucas Karelis, P.E., Stanley Consultants, Inc.

Fall Protection Efforts on Lattice Transmission Towers
David O’Clare, P.E., David Hesse, P.E., Bonneville Power Administration

9:30 – 10:15 A.M. – REFRESHMENT BREAK
Exhibit Hall A-B, 1st Floor, BCC
Sponsored by Underground Devices, Inc.

10:15 A.M. – 12:00 P.M.
SESSION 9: LINE DESIGN
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Wesley Oliphant, P.E., F.SEI, F.ASCE

This is your chance to hear from the experts on line design. Topics in this session include an overview of design practices for 115kV to 230kV lines, broken-wire loading including full-scale testing, development of an online historical ice storm map application, and the theory behind the revisions to the weather-related load section of the 4th Edition of ASCE-74.

Best Practices for the Design of 115kV to 230kV Overhead Transmission Lines
Leon Kemper Jr., P.E., Ph.D., F.SEI, M.ASCE, Bonneville Power Administration; Asim Haldar, P.E., Ph.D., CEATI

Dynamic Transmission Line Loading
Bryan Williams, P.E., Oncor Electric Delivery Company; Erik Rugeri, P.E., Jason Pfaff, D.M., POWER Engineers, Inc.

Compilation of Damaging Ice Storms in the United States
Kathleen Jones, M.S.E., Richard Bates, B.S., Cold Regions Research and Engineering Laboratory

Updating ASCE Manual No. 74: Guidelines for Electrical Transmission Line Structural Loading
Thomas Mara, P.Eng., Ph.D., Boundary Layer Wind Tunnel Laboratory; Roberto Behncke, Ph.D., POWER Engineers, Inc.

12:00 – 1:30 P.M. – LUNCH
Exhibit Hall A-B, 1st Floor, BCC
Sponsored by POWER Engineers

1:30 – 2:50 P.M.
SESSION 10: RERATING AND UPGRADING
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Tim Cashman, P.E., M.ASCE

Is this line really a fixer-upper or should I tear it down and rebuild? This session will highlight three upgrade projects that overcame the congestion of a narrow ROW owned by a railroad, the complexities of raising lattice towers, and the challenges of increasing the ampacity of a 500kV line crossing a lake and state park.

Squeezing 21st Century Demand into 20th Century Right of Way
Bill Rusciolli, P.E., Sean Crandall, EIT, POWER Engineers

Raising Transmission Line Steel Towers
Ashley Dupree, ITC Holdings Corp; Fang Liu, P.E., Jonathon Rumble, P.E., Ricardo Ortegon, P.E., Black & Veatch;

Thinking Outside the Box: Tennessee Valley Authority Uses ACCR Conductor on 500-kV Transmission Line
Jeffery Phillips, P.E., Tennessee Valley Authority; Mark Ryan, 3M; Doyle Glass, Hubbell Power Systems

2:50 – 3:35 P.M. – REFRESHMENT BREAK
Prefunction, 1st Floor, BCC
Sponsored by IEEE-SA

3:35 – 5:00 P.M.
SESSION 11: CODES AND STANDARDS
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Otto Lynch, P.E., F.SEI, M.ASCE

“Fun facts that are sure to impress your colleagues!” What’s going on at ASCE? Hear updates on standards ASCE 48 for Design of Steel Transmission Pole Structures and ASCE 10 for Design of Latticed Steel Transmission Structures, as well as updates on the following Manuals of Practices: Substation Design; Transmission Structure Loadings; FRP Structures; Concrete Structures; Wood Structures; and Aesthetic Structures. As a bonus, find out what’s new with the 2017 NESC.

ASCE Manuals of Practices Update
Michael Miller, P.E., M.ASCE, SAE Towers Ltd., Chair of ASCE SEI Electrical Transmission Structures Committee

Update on ASCE 48-16: Design of Steel Transmission Pole Structures
Kenneth L Sharpless, P.E., ASEC, Inc., Chair of ASCE 48

Update on ASCE 10-15: Design of Latticed Steel Transmission Structures
Robert E. Nickerson, P.E., F.SEI, M.ASCE, Consulting Engineer, Chair of ASCE 10

Upcoming Changes to the 2017 National Electrical Safety Code
Sue Vogel, IEEE Standards Association, Senior Manager of National Electrical Safety Code

5:00 – 5:15 P.M. – CONFERENCE CLOSING
Taneycomo Ballroom, 1st Floor, BCC
Session Lead: Otto Lynch, P.E., F.SEI, M.ASCE
The Structural Engineering Institute of ASCE is pleased to have Quanta Services sponsor Demonstration Day for the Electrical Transmission and Substation Structures 2015 Conference. This event will offer participants unique opportunities to witness several overhead power line construction and supplier demonstrations in a single day.

DEMONSTRATION ITINERARY

Demonstrations will take place in the Branson Convention Center parking lot.

Special requirements for Demonstration Day:

- Individuals are required to sign the demonstration waiver form in advance of their participation.
- Closed toe shoes.
- Long pants.
- Eye, ear, hard hat, and other protection will be provided on site as needed.
- Please dress appropriately for the weather and possible cooler temperatures.

The exhibits will be open throughout the day but some demonstrations and activities may have specific times. Times will be posted and, if necessary, attendees will be provided schedules for attendance.

DEMONSTRATION HOURS

- 9:30 – 11:30 A.M. – Demonstrations Open
- 11:30 A.M. – 1:00 P.M. – Lunch
- 1:00 – 3:30 P.M. – Demonstrations Open

Lunch and refreshments throughout the day will be provided by Quanta Services.

Demonstration events currently planned are:

- High-Voltage Scaffolding Substation
- Energized Pulling Zone with Suits
- Crux Steel-Cap Micropile Setup
- UT Weld Inspection
- Substation Switch Demonstration
- Pallet-Mounted Display Robotic Arm
- B.H. Aerial Lift Truck Setup
- Video of Training Facility / Energized Work
- Inspection Drone Demonstration
- Steel Pole Slip Joint / Pole Jacking Demonstration
- Hybrid Pole Assembly Joining Spun Concrete and Tubular Steel Poles
- Terrestrial LiDAR Demonstration
- Aerial LiDAR Demonstration
- Composite Pole Jacking Assembly Demonstration
- Substation Switch Demonstration

Companies involved in Demonstration Day include:

- Quanta Services
- Quanta Services Operating Companies: CRUX Subsurface
- Quanta Energized Services
- Advance Aerial Inspection Resources
- Hubbell Power Systems, Inc.
- Network Mapping Inc
- RS Technologies Inc.
- Trinity Meyer Utility Structures
- Valmont-Newmark

All outdoor demonstration activities are subject to WEATHER conditions and may be cancelled or modified due to inclement weather.
**POSTER SESSIONS**

**POSTERS ARE LOCATED IN THE EXHIBIT HALL MONDAY, SEPTEMBER 28 TO WEDNESDAY, SEPTEMBER 30.**

**Modification of Single-Circuit 765 kV Lattice Steel Towers for a Double-Circuit 345 kV Application**
Todd Edwards, P.E., MS, ITC Transmission; Joe Pattison, P.E., Burns & McDonnell

**Tools for Evaluation of the Capacity and Durability of New or Existing Transmission Tower Foundations**
Bernard Hertlein, FACI, M.ASCE, GEI Consultants, Inc.

**New Approach for Upgrading an Existing 115 kV Transmission Line**

**Examination of Yawed Wind Loading on Transmission Towers**
Thomas Mara, P.Eng., Boundary Layer Wind Tunnel Laboratory; Roberto Behncke, Ph.D., POWER Engineers, Inc.

**Updated Gust Response Factors for Transmission Line Loading**
Thomas Mara, Ph.D., P.Eng., Boundary Layer Wind Tunnel Laboratory

**Transmission Pole Drilled Pier Foundation Using Inclined Earth Anchors to Counteract Eccentric Forces**
Andrew Canopy, P.E., Darren Ratliff, P.E., Ameren; Robert Chantome, P.E., S.E., Hanson Professional Services Inc.

**Drilled Shafts and Design-Build Micropiles for Environmentally Sensitive Wood-to-Steel Project**
Rick Walsh, P.E., G.E., Mike Kennedy, B.S., Hayward Baker Inc.

**Transmission Pier Foundation QC/QA**
Gina Beim, P.E., M.ASCE, Pile Dynamics, Inc; Robert Kluge, P.E., Matthew Lohry, P.E., American Transmission Company LLC; Daniel Belardo, GRL Engineers, Inc.

**Design and Construction Challenges in Transmission Line and Structures in Crossing a River for Bridge Relocation**
Rengaswamy Shanmugasundaram, P.E., ASCE Life Member, W.Greg Ford, P.E., Rodger Calvert, P.E., Mesa Associates Inc.

**Impact of Extreme Weather on Transmission line Structures**
Ibrahim Hathout, Ph.D., Karen Callery, M.Sc.E., Hydro One Inc.

**The Evolution of Large Diameter Helical Piles for Transmission Line Foundations**
Thomas Bradka, M.Eng., P.E., Ashref Alzawi, Ph.D., P.Eng., Alvin Pyke, P.Eng., Helical Pier Systems

**Drilled Shafts for 138KV Tower Foundations**
Aaron Waldren, Mike Kennedy, Anderson Drilling; Rick Walsh, P.E., G.E., Hayward Baker Inc.

**Study of Electric Transmission Line Deep Foundation Design for Upgrade to New Substation Facilities**
Peter Kandaris, P.E., DiGioia Gray & Associates; Steve Davidow, P.E., S.E., Crux Subsurface, Inc.

**Highland City Repurposing of Existing Substation Property for Upgrade to New Substation Facilities**
David Thornton, P.E., Southern Company

**Structural Performance of Bolted Connectors in Retrofitted Transmission Tower Leg Members**
Chenghao Lu, Ph.D candidate, Xing Ma, Ph.D, Julie E. Mills, Ph.D, University of South Australia

**WAPA 230kV Transmission Line and Substation: Reconductor Project with ACCR**
Ross Clark, P.E., Josh Ross, B.S., Western Area Power Administration

**Effective Application of NERC CIP-014-1 Provisions To Existing Transmission and Substation Facilities**
James Taylor, P.E., S.E., M. ASCE/SEI, Robert Parker, CPP, PSP, Cris DeWitt, CISSP, GIAC, ABS Consulting

**Repair of Corrosion-Damaged Substation Structures**
Mo Ehsani, PhD, P.E., S.E., University of Arizona; Gannon McGhee, P.E., Tucson Electric Power Co.

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**INCLUDED IN YOUR 2015 REGISTRATION FEE**

**REGISTRATION CATEGORY**

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**DAILY REGISTRATION**

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**Visit ASCE/SEI Booth 99**

for special offers and opportunities, and learn what’s new. Make sure you get member benefits and discount rates on conferences, publications, continuing education and more.
GENERAL INFORMATION

OFFICIAL CONFERENCE HOTELS:

Hilton Branson
Convention Center Hotel
200 East Main Street
Branson, Missouri 65616
Tel: 866-442-0959

Hilton Promenade
At Branson Landing
3 Branson Landing
Branson, Missouri 65616
Tel: 866-568-0890

Best Western Plus
Landing View Inn & Suites
403 West Main Street
Branson, MO 65616
Tel: 417-334-6464

Radisson Hotel Branson
120 Wildwood Drive S
Branson, MO 65616
Tel: 417-335-5767

CONFFERENCE VENUE:

Branson Convention Center
200 Sycamore St, Branson, MO 65616
The convention center provides complimentary parking for those renting a car or staying at the Radisson and Best Western Hotels.

SHUTTLE TRANSPORTATION DURING CONFERENCE

Sponsored by McWane POLES
For attendees staying at the Radisson hotel, complimentary shuttle bus service will be provided during limited conference hours. Shuttle bus hours of operation will be posted in the hotel lobby.

GENERAL

ASCE Bookstore
Don’t miss this opportunity to visit ASCE’s Bookstore. Stop by booth #98 during Exhibit Hall hours to browse through hundreds of titles from the Society’s extensive electrical transmission and structural engineering collection. Free domestic shipping for onsite purchases.

ATTENDEE PACKETS

All attendees will receive their name badges and any tickets ordered at the ASCE Registration Desk during registration hours. Early-bird and Advance registrants should present the official ASCE registration receipt to on-site registration staff to obtain conference materials.

ATTIRE

The dress code for the Conference is business casual (i.e. slacks, casual dresses) to business attire (i.e. neckties, business suits). Please note that certain events may have specific details on attire, and you should refer to the description of that event for more information.

BADGE POLICY & RIBBONS

Your Conference badge is your admission to the educational sessions. Please wear your badge at all times in the Hotel and Convention Center/Exhibit Hall. Tickets are required for pre-conference events, meals, and special events. Where tickets are required, please be sure to bring your tickets with you to each event as you will not be admitted without a ticket. ASCE recommends you remove your badge when leaving the Hotel or Convention Center. Several ribbon categories are available at the Registration Desk, please ask a staff member for an appropriate one.

SPEAKER READY ROOM SCHEDULE

Staging Room 1, 1st Floor, BCC
SUNDAY: 11:00 A.M. – 4:00 P.M.
MONDAY, TUESDAY: 7:00 A.M. – 6:00 P.M.
WEDNESDAY: 7:00 A.M. – 3:00 P.M.

MEDICAL EMERGENCIES

ASCE hopes that your visit to the Conferences will be free from illness or injury, but in case you or a family member needs medical attention during your stay at the Hotel, please contact the Front Desk from any house phone. Hotel Staff will respond immediately to your location. At the Convention Center, you should dial security from any house phone to seek help. For life of threatening emergencies, such as chest pain, shortness of breath, or severe abdominal pain, call 911.

The closest hospital is:  
Cox Medical Center Branson  
251 Skaggs Rd, Branson, MO  
(417) 335-7000

The closest dental office to the Convention Center is:  
Dr. Daniel F. Stibich, DMD  
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# 2015 Exhibitors

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